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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,542	01/23/2002	Mark R. Wilkinson	MARLO-101 (24625.01)	8854

26418 7590 01/16/2004

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EXAMINER

PEAVEY, ENOCH E

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/055,542

Applicant(s)

WILKINSON, MARK R.

Examiner

Enoch E Peavey

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-9 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 4,10 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

I. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 1, line 4, "a substantially rigid cylindrical **bearing** dimensioned..." presents new matter.

A) Although the element 31 has been referred to as a body (in the original claim language), a bushing seal element (throughout the entire specification) and having a bearing surface (page 2, line 11), at no point has the element 31 been referred to as a bearing prior to the Amendment filed 15 October 2003.

B) While it is logical that all bearings have bearing surfaces, it does not logically follow that all bearing surfaces comprise bearings e.g. a shaft may have a bearing surface, however a shaft is not a bearing.

C) This point is highlighted because it seems as though applicant is trying to make an inherent distinction between an element described as a bushing and an element described as a bearing by stating "an element identified as a throttle bushing does not show or suggest applicant's bearing" see Page 6, paragraph 3 of the amendment filed 15 October 2003.

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D) Again, attention is drawn to the applicant's specification, which consistently refers to the element, now described as a bushing, as a bushing seal element (see pg 4, line 13 of the Specification).

Claim Rejections - 35 USC § 102

II. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

A) Claims 1, 3, 5, 6, 9 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Dziver et al., Pub. No. US2003/0026718.

i. Dziver discloses a shaft sealing system comprising a substantially rigid cylindrical bearing (10) dimensioned to fit into the seal cavity (page 1, paragraph 6, line 3).

ii. The bearing (10) has an outer surface closely dimensioned to fit into the seal cavity (i.e. the outer surface will come into close relationship when positioned inside a seal cavity) with an inner bore closely dimensioned along the full length of the bearing to fit over the shaft (page 1, paragraph 6, 7) at one end of the seal cavity to provide a bearing surface for the shaft (along 18).

iii. The bearing (10) may be formed from a filled thermoplastic material (page 2, paragraph 27, line 15).

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- iv. The bearing (10) is split along the center-line (Figure 1).
- v. Corresponding alignment holes (DRILL) are formed in each side of the split seal and alignment pins are positioned in the alignment holes (FIG. 8).
- vi. The thermoplastic material may be filled with carbon (page, paragraph 27, line 15).

Claim Rejections - 35 USC § 103

III. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dziver in view of Rinne, US No. 5,538,256.

- i. Dziver discloses substantially the same seal as applicant except for the seal being made of a non-ferrous metal. Rinne discloses using such a material (Col. 6, lines 64-67) in a seal in order to reduce friction in the sealing assembly.
- ii. It would have been obvious to one of ordinary skill in the art at the time of applicants invention to modify Dziver as taught by Rinne in order to reduce the amount of friction in the seal assembly.

B) Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dziver in view of Zapalac, US No. 5,979,483.

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i. Dziver discloses substantially the same seal as applicant except for the outer surface of the cylindrical body including a groove with an o-ring disposed therein.

Zapalac discloses using such an arrangement (Col. 6, lines 64-67) in order to prevent leakage along the surface of the cylindrical body.

ii. It would have been obvious to one of ordinary skill in the art at the time of applicants invention to modify Dziver as taught by Zapalac in order to further prevent leakage along the surface of the cylindrical body.

C) Claims 8, 12 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dziver in view of Burgess, US Patent No. 5,772,218.

i. Dziver discloses substantially the same seal as applicant except for the nominal structure of at least one compressible packing ring (8) disposed on the motor side of the rigid bearing in the seal cavity and the bearing member positioned at the output end of the seal cavity.

ii. Burgess discloses such an arrangement (FIG. 4) in order to fill the annular gap in the cavity (Col. 1, lines 21-23).

iii. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Dziver as taught by Burgess in order to fill the annular gap in the cavity.

Examiner Note: In making the rejection no inherent difference between a bushing and bearing has been recognized for reasons described above.

Allowable Subject Matter

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Claims 4, 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

IV. Examiner acknowledges that neither the Hebard reference or the Greiman reference disclose the bearing surface as claimed by the applicant, i.e. the inner bore closely dimension along the full length of the bearing.

However the Dziver reference does show the inner bore closely dimension along the full length of the bearing.

Acknowledgement of the commercial success of the invention of the instant application is noted, however the invention is still anticipated as claimed, by the newly cited reference, Dziver.

V. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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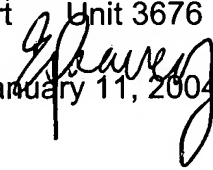
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


IV. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Enoch E Peavey whose telephone number is 305 1977. The examiner can normally be reached on Mon-Fri 8:00 am to 4:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (703) 308- 3179. The fax phone number for the organization where this application or proceeding is assigned is 305 3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 1113.

Enoch E Peavey
Art Unit 3676


January 11, 2004


Anthony Knight
Supervisory Patent Examiner
Group 3600